

Yakima Air Terminal/McAllister Field **Airport Master Plan Update**

Airport Compatible Overlay District (ACOD) **Discussion**



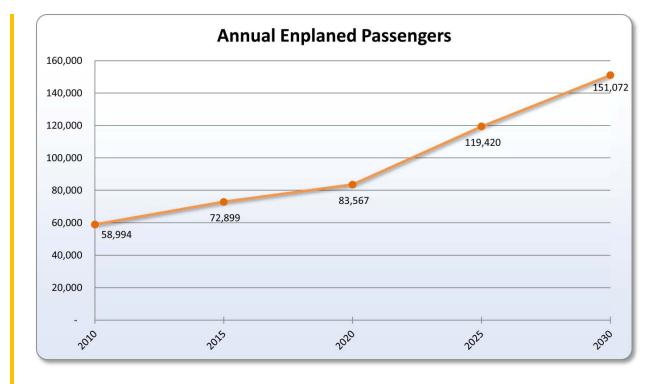
YAKIMA AIR TERMINAL / McALLISTER FIELD | Yakima, WA



Prepared for Public Meeting Number 2 held 20 June 201

Forecast Demand - Passengers

- Moderate annual growth in the shortterm.
- More of the "potential market" will be claimed.
- By 2030, more than 150,000 passengers will enplane at YKM.





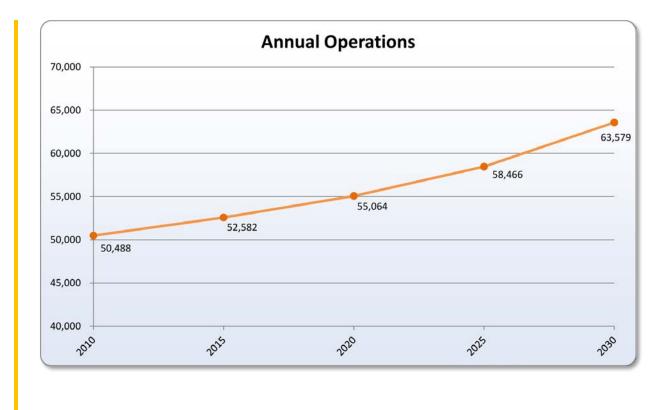


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Forecast Demand - Operations

- Moderate annual growth is expected through 2030.
- 2030 forecast is for 63,000 annual operations.





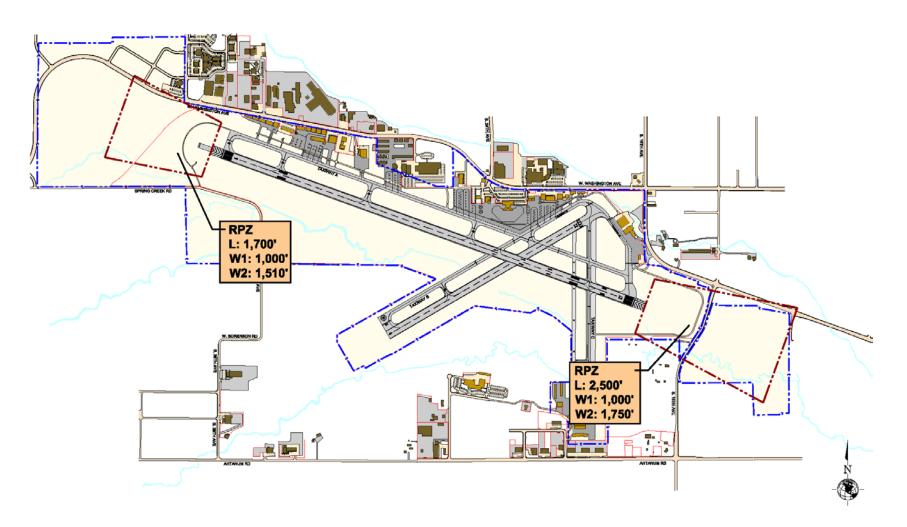
Airfield Issues – Land Use

- Airport Compatibility Overlay District (ACOD) Elements:
 - *Airport Layout:* The orientation and length of the runways. (FAA)
 - **Obstructions to Air Navigation:** Part 77 Imaginary Surfaces. (FAR)
 - Noise Impacts: Levels above 65 LDN as determined using the FAA's Integrated Noise Model (INM). (FAR)
 - Airport Use Zones: Traffic patterns, aircraft turning zones, airport safety zones. (WSDOT)





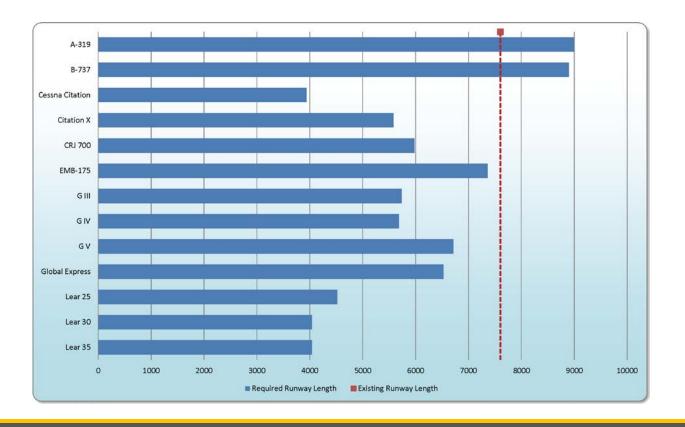
Airfield Alternative 1 "Do-Nothing"





Airfield Requirements – Runway Length

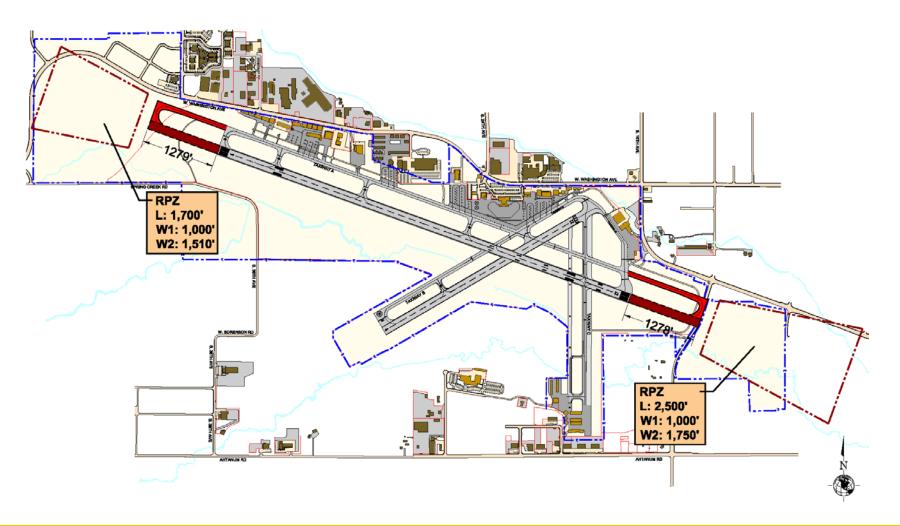
7,604 feet is sufficient take-off length for most aircraft expected to use the airport.





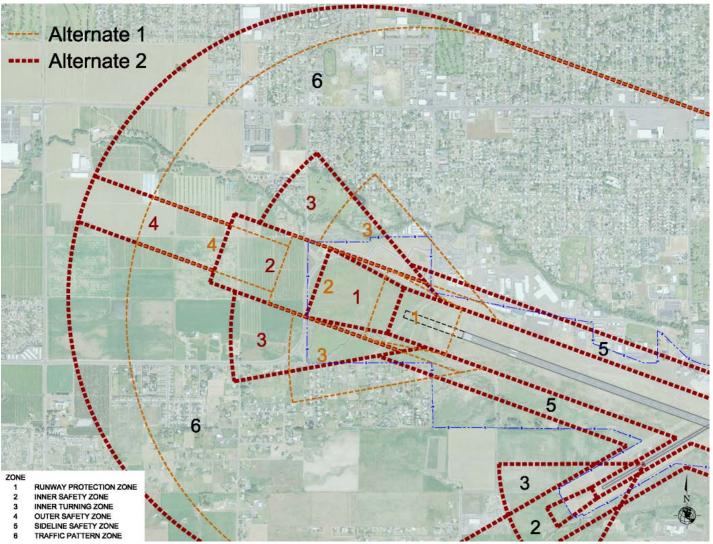


Airfield Alternative 2 Extend to 10,000 feet





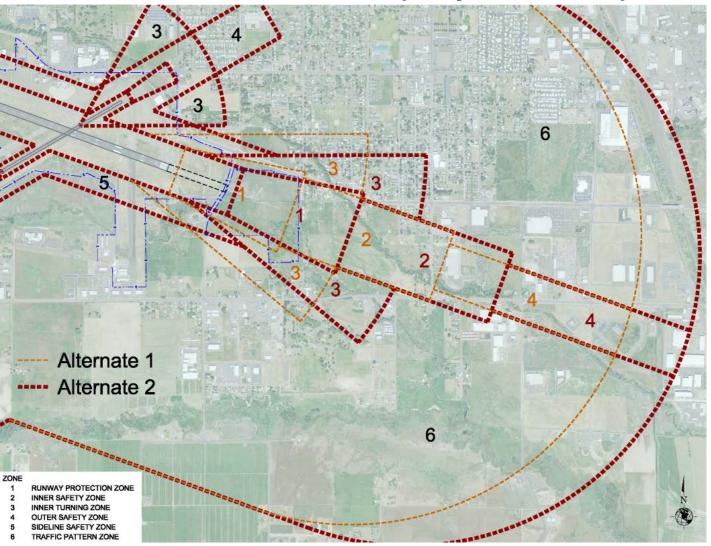
Airfield Alternative 2 Extend to 10,000 feet (Rwy 9 Zones)







Airfield Alternative 2 Extend to 10,000 feet (Rwy 27 Zones)

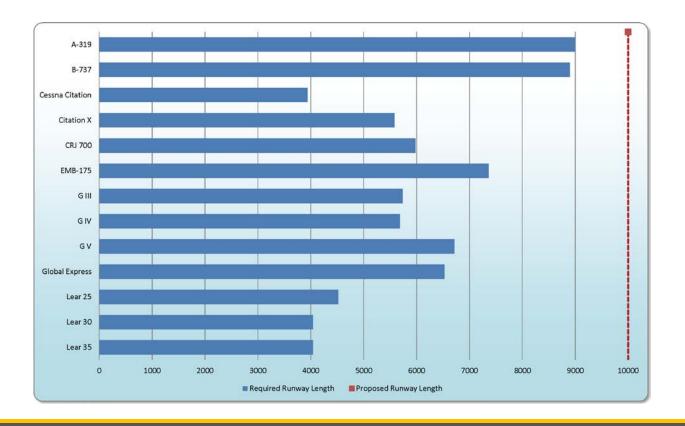






Airfield Requirements – Runway Length

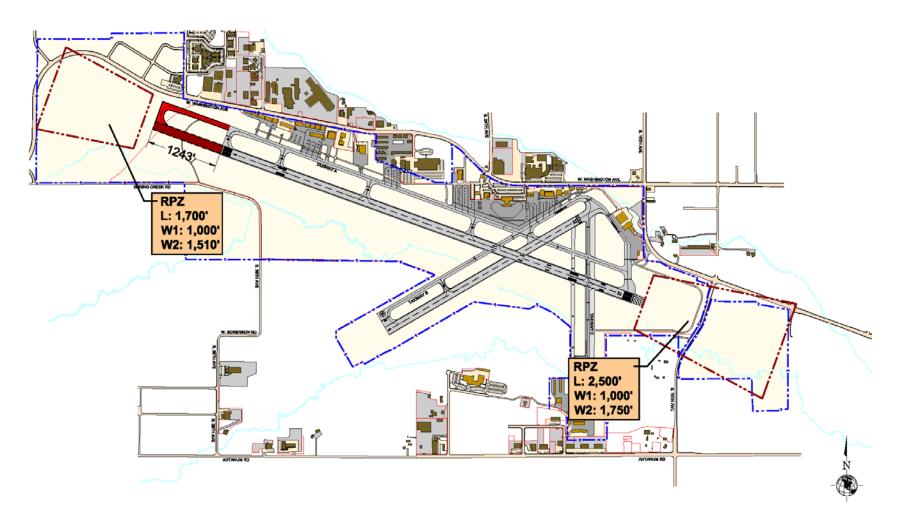
10,000 feet is sufficient take-off length for all aircraft expected to use the airport.



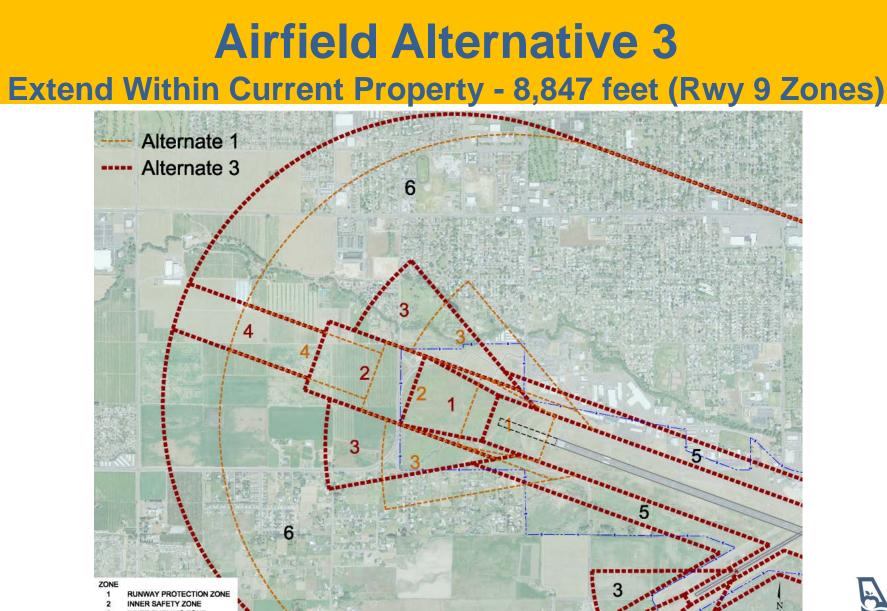




Airfield Alternative 3 Extend Within Current Property - 8,847 feet







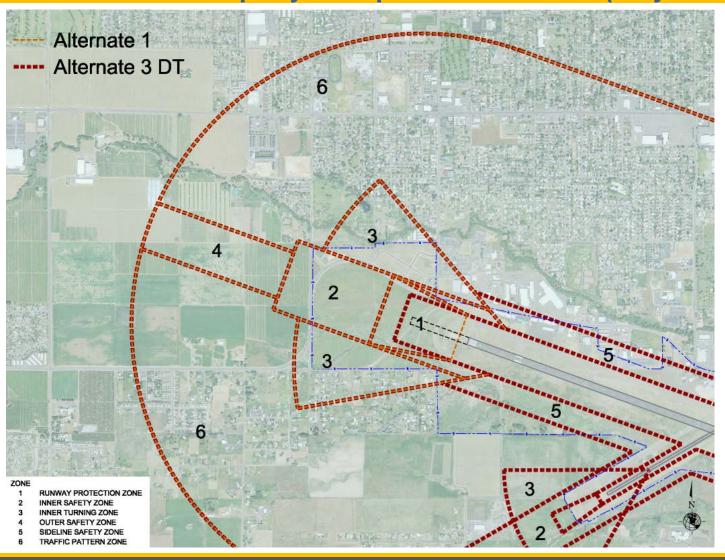
- 3 INNER TURNING ZONE 4 OUTER SAFETY ZONE
- 5 SIDELINE SAFETY ZONE
- 6 TRAFFIC PATTERN ZONE





Airfield Alternative 3

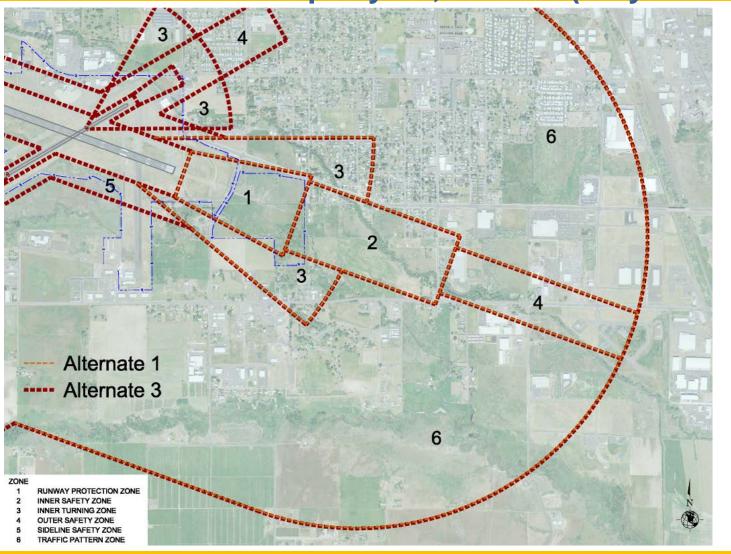
Extend W/in Current Property – Displaced Threshold (Rwy 9 Zones)





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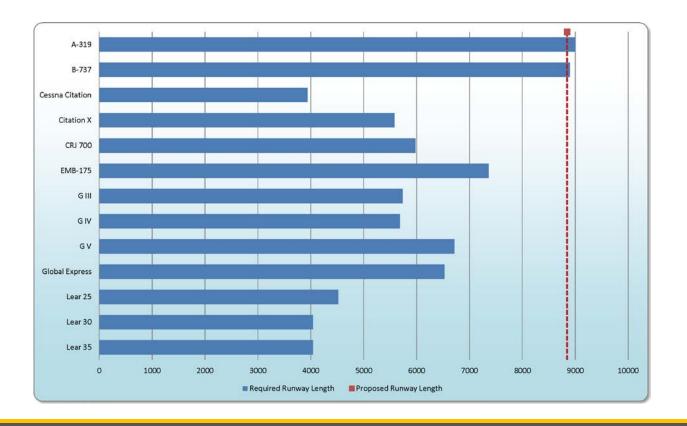
Airfield Alternative 3 Extend Within Current Property - 8,847 feet (Rwy 27 Zones)





Airfield Requirements – Runway Length

8,847 feet is sufficient take-off length for most aircraft expected to use the airport.







Airfield Requirements – Runway 4/22

- Wind analyses show more than 95% coverage is provided on Runway 9/27 at a 13 knot crosswind.
- Runway 9/27 provides sufficient capacity for forecast activity through the year 2030.
 - <u>Runway Capacity</u>: 230,000 annual operations.
 - Forecast Demand: 63,000 annual operations.
- Runway 4/22 is not eligible for FAA funding.

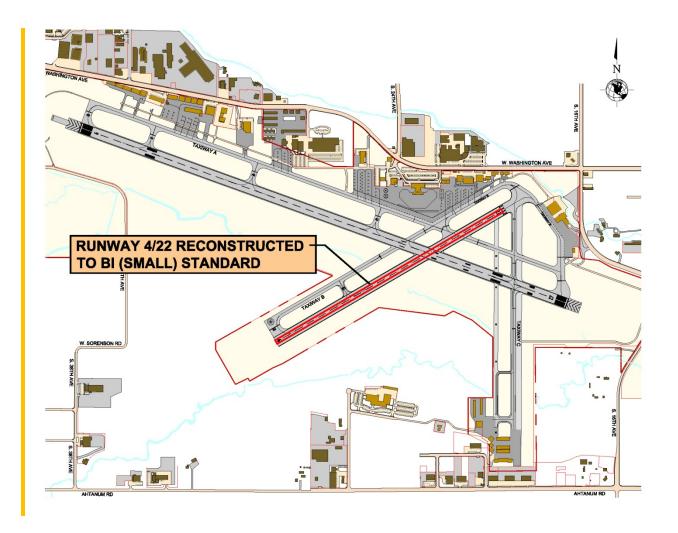




Runway 4/22

Evaluation Factors

- Cost of reconstruction.
- Potential alternative funding sources.
- Determine annual usage.
- Is it feasible to maintain?





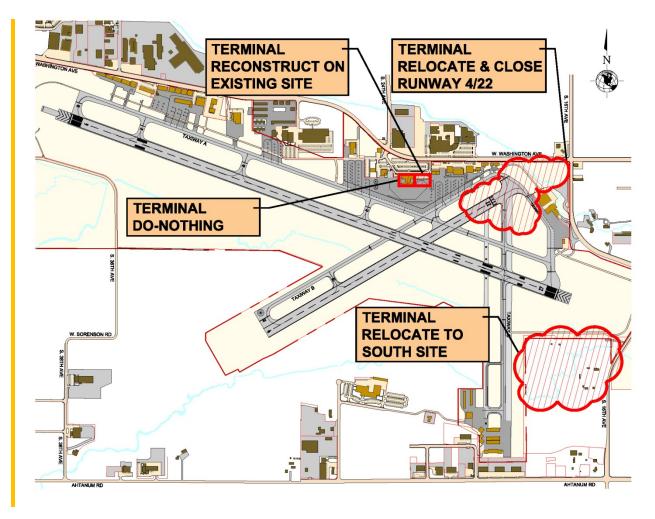
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Terminal Alternatives

Evaluation Factors

- ATCT line-of-sight.
- Airspace.
- Expandability/ flexibility.
- Community access.
- Airfield issues.
- Adjacent land uses.
- Design issues.
- Estimated cost.

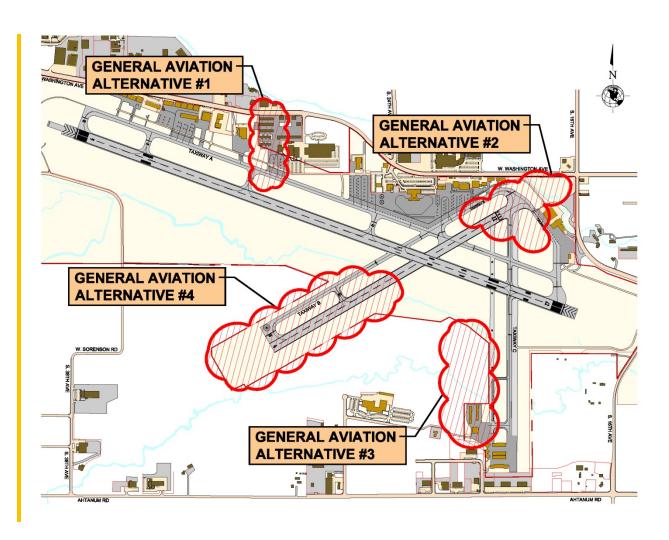




General Aviation Alternatives

Evaluation Factors

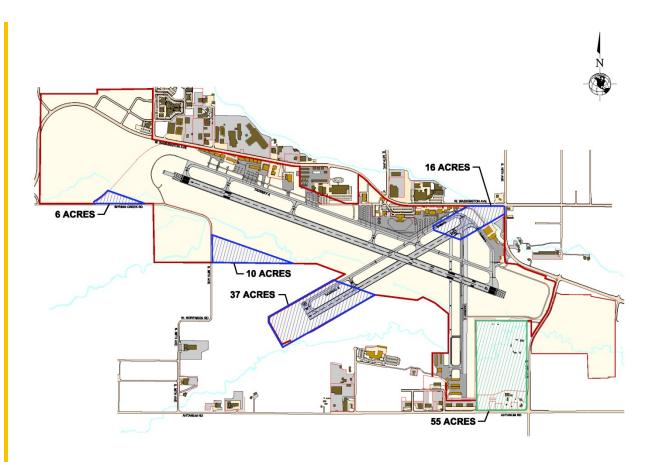
- Compatibility with adjacent land use.
- Meet all FAA criteria.
- Environmental issues.
- Estimated cost.





Other Considerations

- Heavy maintenance and overhaul (M&O) facilities.
- Aircraft manufacturing.
- Aviation-related industrial.
- Aviation-related commercial.





Questions - Concerns









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Airfield Issues – Land Use

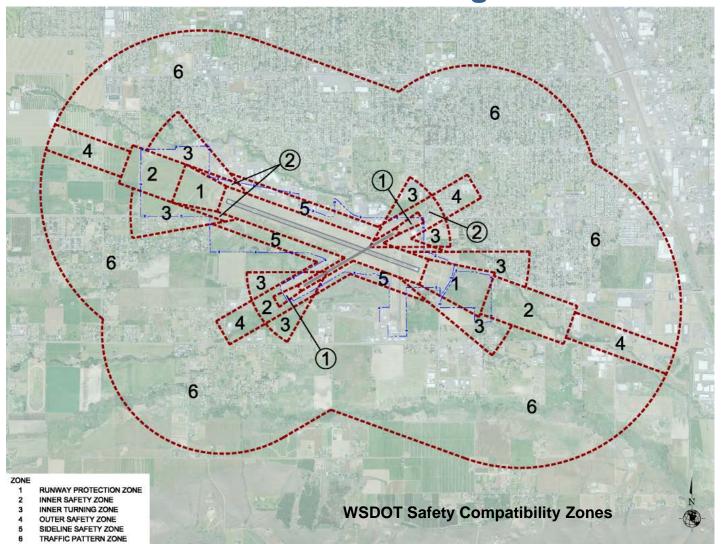
WSDOT Safety Compatibility Zones

- Zone 1: Runway Protection Zone (RPZ).
- Zone 2 : <u>Inner Safety Zone</u> the extended RPZ; expect low flying aircraft.
- Zone 3 : Inner Turning Zone expect low flying aircraft.
- Zone 4 : <u>Outer Safety Zone</u> extended runway centerline. Most critical on instrument runways.
- Zone 5 : <u>Sideline Safety Zone</u> area equates to the Runway Safety Area (RSA).
- Zone 6 : <u>Traffic Pattern Zone</u> FAR Part 77 horizontal surface.





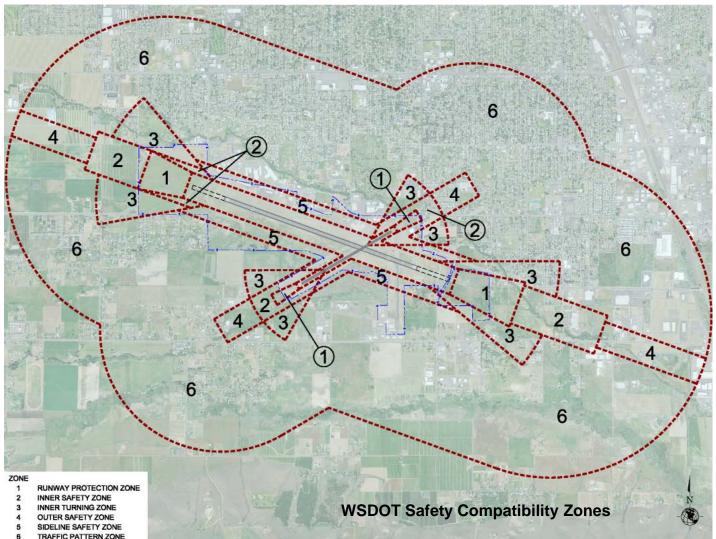
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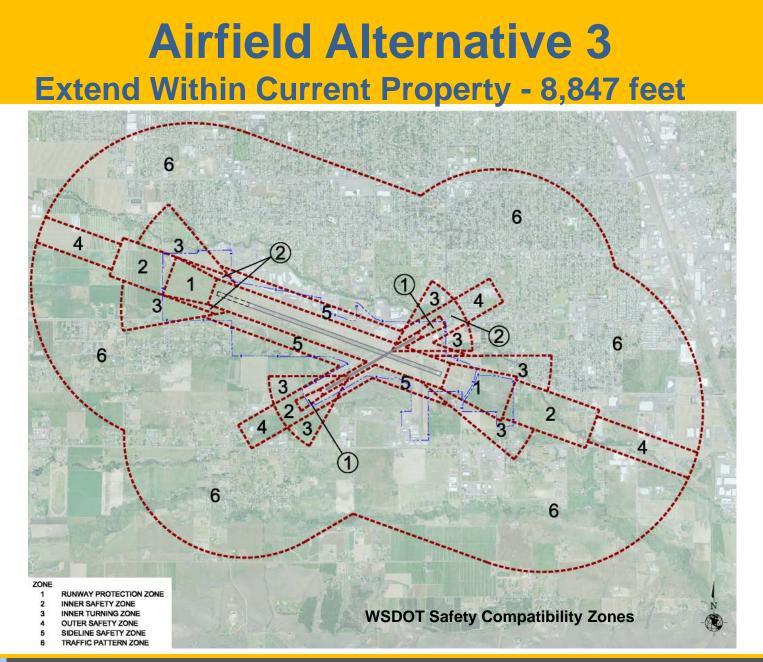


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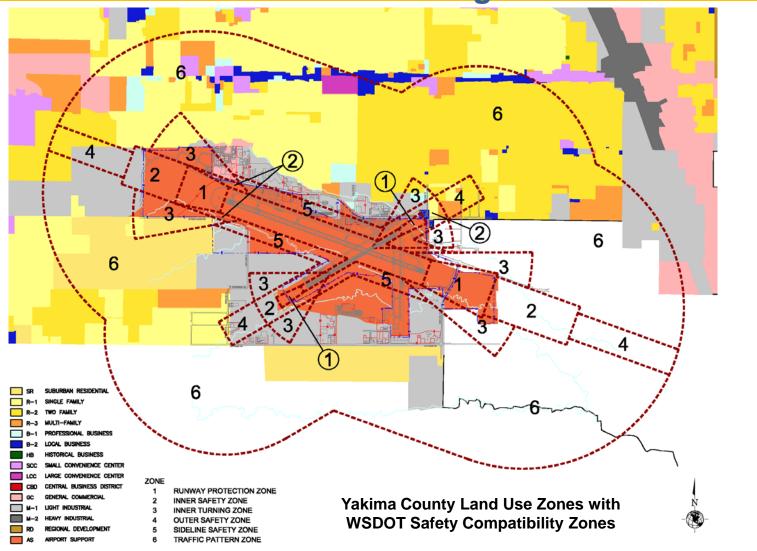






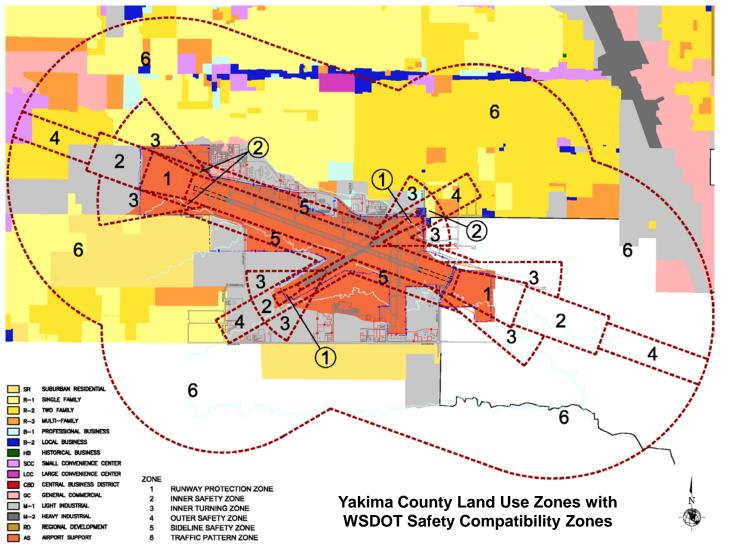
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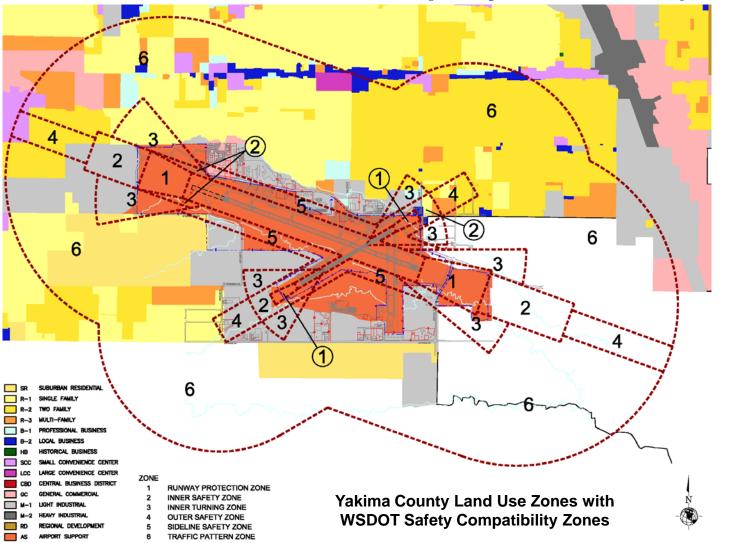
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Airfield Alternative 2 Extend to 10,000 feet





Airfield Alternative 3 Extend Within Current Property - 8,847 feet)





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